PATENT
D-7512

OFF-RIDGE ROOF VENT

CROSS-REFERENCE TO RELATED APPLICATION

Not Applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable.

REFERENCE TO A MICROFICHE APPENDIX

Not Applicable.

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates to vents to be installed in building roofs and particularly to off-ridge roof vents employing apparatus to minimize the entrance of moisture and debris into the vented space.

RELEVANT ART

A wide variety of roof vents exist that are comprised of a complex set of elements that are not easily assembled or installed. In addition, baffles are needed to control airflow and prevent entrance into the vented space of water and debris.

BRIEF SUMMARY OF THE INVENTION

A roof vent adapted to be mounted to a roof comprising a hood member having a front portion defining a front opening and a rear portion mountable over an opening in a roof, a pair of spaced side wall members extending between the front and rear portions of the hood member, and a baffle wall spaced forwardly of the front portion of the hood member and extending substantially the width of the front opening to inhibit entry of wind into the front opening. The front portion of the hood member includes an elongate subtending front wall member. The front wall includes a lower elongate edge portion formed

into a first channel open rearwardly extending substantially the complete width of the front wall. The baffle wall includes an upper edge portion and a lower edge portion. The upper edge portion of the baffle wall formed as a lip for diverting wind directed against the baffle wall upwardly to minimize the amount of such wind entering the front opening.

Also included is an elongate horizontal member extending the width of the baffle wall having a front edge portion integral with the lower edge portion of the baffle wall and a rear portion having a vertical disposed wall member. The wall member of the rear portion of the member includes an upper edge portion formed as a second channel open forwardly extending substantially the width of the horizontal member. A filter means is mounted between the first and second channels and includes a screen member. Each side wall member includes a lower edge portion and an upper edge portion, the lower edge portion including a first bendable planar flange member being movable 90° to locate the flange member against a surface of a roof. The upper edge portion of each side wall includes at least one second bendable planar flange member being movable 90° to locate the second flange member inside the hood member.

A roof vent adapted to be mounted to a roof vent adapted to be mounted to a roof comprising a hood member having front and rear portions and a pair of parallel spaced edge portions integral with the rear portion for mounting the hood member over an opening in a roof. The front portion is spaced away from a surface of a roof when the hood member is mounted to a roof to define a pair of spaced side openings and a front opening, a pair of side wall members for covering a respective side opening, and a baffle wall spaced forwardly of the front portion of the hood member, the baffle wall extending substantially the width of the front opening to inhibit entry of wind into the front opening. The front portion of the hood member includes a subtending front wall member extending between the edge portions. The front wall includes a lower elongate edge portion formed into a first channel open rearward extending substantially the complete width of the front wall. The baffle wall includes an upper edge portion formed as a lip for diverting wind directed against the baffle wall upwardly to minimize the amount of such wind entering the front opening. An elongate horizontal member extends the width of the baffle wall having a front edge portion integral with the lower edge portion of the baffle wall and a rear portion having a vertical disposed wall member, the wall member of the rear portion of the member including an upper edge

portion formed as a second channel open forward extending substantially the width of the horizontal member. Filter means is mounted between the first and second channels and includes a screen member. Each side wall member includes a lower edge portion and an upper edge portion, the lower edge portion including a first bendable planar flange member being movable 90° to locate the flange member against a surface of a roof. The upper edge portion of each side wall includes at least one second bendable planar flange member being movable 90° to locate the second flange member inside the hood member.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The novel features which are believed to be characteristic of this invention are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and method of operation, together with further objects and advantages thereof, may best be understood by reference to the following description taken in connection with the accompanying drawings, in which:

FIG. 1 is a perspective view of the off-ridge roof vent in accord with the present invention;

FIG. 2 is a side elevational pictorial view of two of the components of the vent of FIG. 1;

FIG. 3 is a plan view of one end cap of the vent of FIG. 1; and

FIG. 4 is a view of another end cap of the vent of FIG. 1.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, the off-ridge roof vent in accord with the present invention is shown at numeral 10. A hood member 11 includes a flat horizontal portion 12 and a rear downwardly sloped portion 13 terminating in flange 14. Two substantially identical side end cap members 15 (FIGS. 3 and 4) each include an inwardly bendable edge portion 16 adjacent portion 13 and another inwardly bendable edge portion 17 adjacent portion 12. A lower outwardly bendable flange 18 is used to mount the vent 10 to a roof.

Further detail of the construction of the vent 10 is illustrated in FIG. 2. A front vertical wall portion 19 extends downwardly from portion 12 and terminates in a channel 20 formed by crimping the lower edge of wall 19. A separate metal sheet is shaped to make baffle

assembly including external wind baffle wall 21 bound by an upper angled lip 22 and a lower lip 23 formed by crimping the sheet to form flat floor member 24 and a further 90° bend to form a vertical rear wall 25 having an upper edge crimped to form a channel 26. Channels 20 and 26 are used to carry a planar screen 27. The space between channel 20 and upper lip 22 of baffle wall 21 defines an opening 28 into vent 10.

Preferably, the hood member of the vent 10 including portions 12, 13, 14, 19 and 20 are formed of a single sheet of metal. Similarly, baffle assembly portions 21, 22, 23, 24, 25 and 26 are also formed from a single sheet of metal. End caps 15 are also formed from a single sheet of metal and further include a forward edge portion 29 and a foldable tab 30 that with edge portions 16 and 17 is bent 90° to fit flush against the inner surfaces of respective portions 12, 13 and 19.

The various parts are secured together by appropriate fastening means such as S-lok connections that brad the pieces together without penetrating either piece and/or blind rivets securing overlapping tabs or flanges at appropriate locations and/or spot welding, as is common in the art.

The vent 10 consists of four main components: a hood member 11 shaped into a flat portion 12, a sloping portion 13, a rear flange 14 and front wall with a channel 20 for carrying one edge of screen 27; two end caps 15; and the baffle assembly providing wall 21 and one channel 26 for carrying one edge of a screen 27.

While the invention has been described with respect to certain specific embodiments, it will be appreciated that many modifications and changes may be made by those skilled in the art without departing from the spirit of the invention. It is intended therefore, by the appended claims to cover all such modifications and changes as fall within the true spirit and scope of the invention.

What is claimed as new and what it is desired to secure by Letters Patent of the United States is: